

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: M:18-49

Name: MD 28 over Seneca Creek

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <input checked="" type="checkbox"/> X	Eligibility Not Recommended _____
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None	
Comments: _____	

Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number M:18-49

SHA Bridge No. 15002 Name: MD 28 over Seneca Creek

Location:

Street/Road Name and Number: MD 28 (Darnestown Road)

City/Town: Dawsonville Vicinity X

County: Montgomery

Ownership: X State County Municipal Other

This bridge projects over: Road Railway X Water Land

Is the bridge located within a designated district: yes X no

 NR listed district NR determined eligible district
 locally designated other
Name of District

Bridge Type:

 Timber Bridge

 Beam Bridge Truss-Covered Trestle
 Timber-and-Concrete

 Stone Arch

 Metal Truss

 Movable Bridge

 Swing Bascule Single Leaf Bascule Multiple Leaf
 Vertical Lift Retractable Pontoon

 Metal Girder

 Rolled Girder Rolled Girder Concrete Encased
 Plate Girder Plate Girder Concrete Encased

 Metal Suspension

 Metal Arch

 Metal Cantilever

X Concrete

X Concrete Arch Concrete Slab Concrete Beam
 Rigid Frame

 Other Type Name _____

Describe Setting:

Bridge 15002 carries MD 28 over Seneca Creek in Montgomery County. MD 28 runs east-west over the northern flowing Seneca Creek. The area immediately adjacent to the bridge has no residential development. The bridge is located in Seneca Creek State Park.

Describe Superstructure and Substructure:

Bridge 15002 is a double-span filled spandrel concrete arch bridge. The length of the bridge is 116 feet. The individual spans have a clear span of 46 feet. The bridge has a rise of 5.5 feet from the springline to the crown. The rise to run ration is 13 percent. The spandrel walls are approximately 13 feet high and 22 feet wide. The pier is approximately 13 feet by 6 feet by 24 feet. There is a clear roadway width of 24 feet, with an overall length of 27 feet 4 inches. According to a 1997 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 52.

The underside of span #1 of the arch has small areas of honeycombing and spalling with rusted, exposed reinforcement bars and fine longitudinal cracks with efflorescence and rust staining along the south edge at the spandrel wall joint. The underside of span #2 has small random areas of honeycombing and spalling, with exposed reinforcement bars and concrete deterioration along the construction joint with the northern spandrel arch. The arch also has efflorescence from the centerline cold joint at the abutment. There is some heavy concrete erosion under weepholes. The face of the pier has heavy erosion at and below the waterline, which exposes the aggregate. Both ends of the piers have spalling with rusted reinforcement bars exposed at the bottom of the spandrel walls and the western face on the south end. The faces of the spandrel wall have fine horizontal cracks and irregular cracks with efflorescence and some exudation. There are also some light random cracks and discoloration. The bottom edge of the spandrel walls have light scaling, fine longitudinal cracks and heavy efflorescence and rust staining coming from the construction joint with the arch barrel. The northern wall in span #2 has a large spall on the bottom at the pier and areas of honeycombing on the bottom of the wall.

The parapets are original. The builders used a closed parapet design that consists of panels securely fastened by dowels to the structure. The parapets are 118 feet on both sides of the bridge. Each endblock has an incised panel measuring approximately 1 foot by 5 feet. The parapets have fine vertical and map cracking. The exterior faces have small popouts from the guardrail placement. Both walls have heavy scaling on the inside faces with aggregate exposed and light scaling on the outside faces. The south wall over the pier also has a small spall with rusted reinforcement bars exposed. Both sets of endblocks are misaligned at the construction joints.

Discuss Major Alterations:

There has been minor patching on the exterior and interiors of the parapet, however, there have been no major alterations to this bridge.

When Built: 1923

Why Built: Improvement of lateral corridors

Who Built: State Roads Commission

Who Designed: State Roads Commission

Why Altered: N/A

Was this bridge built as part of an organized bridge building campaign?

No, this bridge was not built as part of an organized bridge building campaign.

Surveyor Analysis:

This bridge may have NR significance for association with:

☒ A Events ☐ Person
☒ C Engineering/Architectural

This bridge was determined eligible by the Interagency Review Committee in March 1996.

Was this bridge constructed in response to significant events in Maryland or local history?

In 1920 the Maryland State Legislature enacted the "Lateral and Post Roads Loan of 1920". The Act that created this loan mandated that the proceeds were to be used for the construction of rural post roads, lateral roads and the extension of the State Roads System, with the assistance of funds from the federal government and several counties in the State. Half of the loan was used for the construction of lateral roads. This money was apportioned to the counties on the basis of actual road mileage. The counties then matched the State's money by bond issues, special assessments, or other revenue.

Between 1920 and 1923 there were 16 miles of roads built. Included in this mileage was 1.3 miles of concrete from Dawsonville towards Seneca. Part of this construction included the construction of Bridge 15002.

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

No, this bridge is not located in an area that is eligible for historic designation.

Is the bridge a significant example of its type?

Yes, this bridge is a significant example of its type. This bridge represents the State Roads Commission's efforts at standardization and unification of the county and state roads throughout the state's road system.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Yes, this bridge retains integrity of its character defining elements. The arch, spandrel walls, abutments, wingwalls, and parapets are original and intact.

Is this bridge a significant example of the work of the manufacturer, designer and/or engineer?

Yes, this bridge is a significant example of the work of the State Roads Commission in the 1920s.

Should this bridge be given further study before significance analysis is made and why?

No, this bridge should not be given further study.

Bibliography:

County inspection/bridge files _____ SHA inspection/bridge files X
 Other (list): _____

Surveyor:

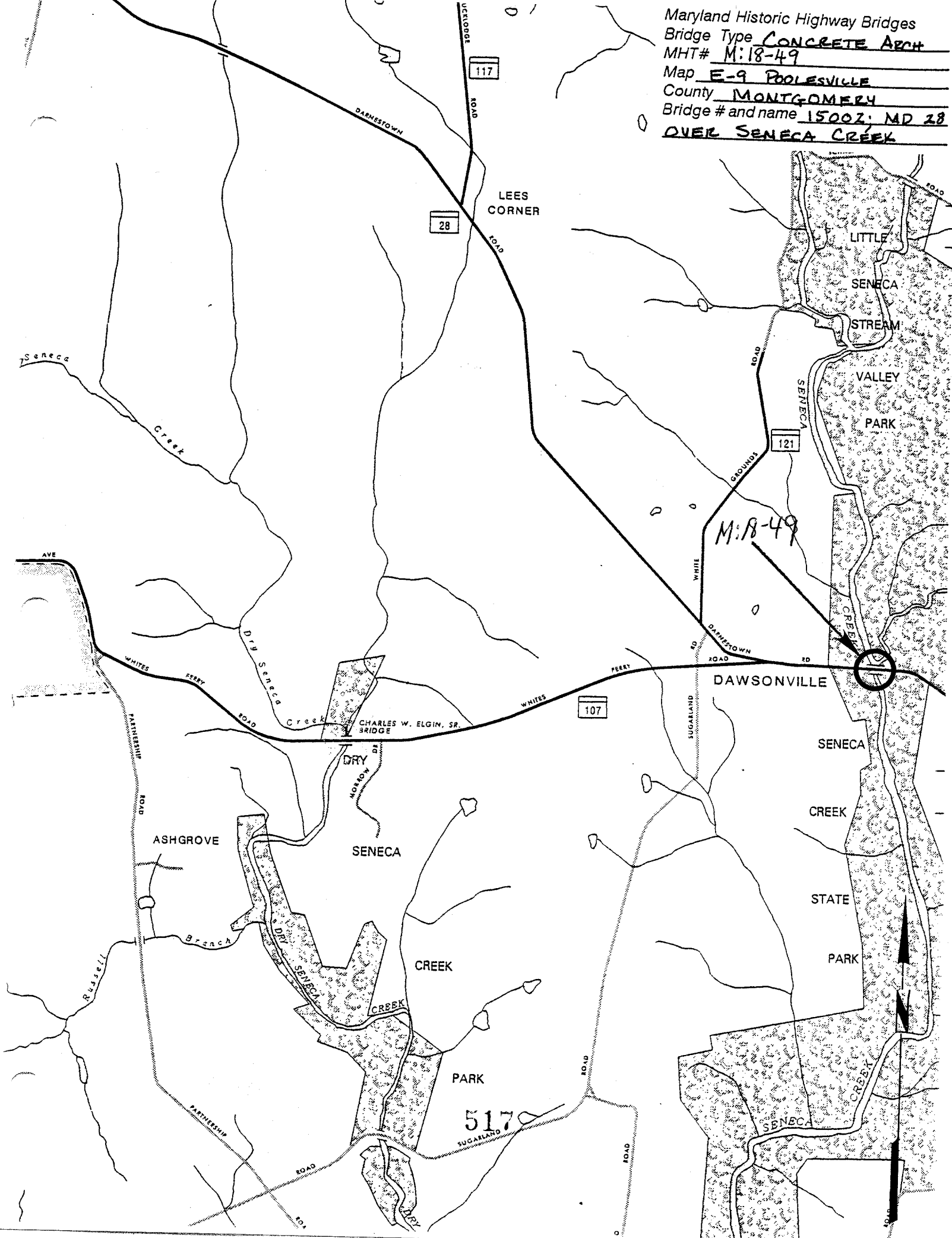
Name: Stacie Y. Webb Date: March 1996

Organization: State Highway Admin. Telephone: (410) 545-8559

Address: 707 N. Calvert Street, Baltimore, Maryland

Edited by P.A.C. Spero & Company, December 1997

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# M:18-49
Map E-9 POOLESVILLE
County MONTGOMERY
Bridge # and name 1500Z, MD 28
OVER SENECA CREEK





Inventory # M:18-49

Name 15002 - MD 28 OVER SENECA CREEK

County/State MONTGOMERY / MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description APPROACH EAST

Number 1 of 4
19 of 36



Inventory # M:18-49

Name 15002 - MD 28 OVER SENECA CREEK

County/State MONTGOMERY /MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description APPROACH WEST

Number ²~~20~~ of ⁴~~36~~



Inventory # M.18-49

Name 15002 - MD 28 OVER SENECA CREEK

County/State MONTGOMERY / MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description ELEVATION SOUTH

3

4

Number 21 of 30



Inventory # M:18-49

Name 15002 - MD 28 OVER SENECA CREEK

County/State MONTGOMERY MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHD

Description ELEVATION NORTH

4 4

Number 22 of 30

CAPSULE SUMMARY
MD 28 over Seneca Creek
(M:18-49)

Bridge No. 15002 is a double-span, filled spandrel, concrete arch bridge that runs east-west over Seneca Creek, in Seneca Creek State Park. Maryland Department of Transportation Bridge No. 15002 is located along MD 28, also known as Darnestown Road. Darnestown Road is a two-lane road, and likewise, the bridge is two lanes wide, supporting one lane of traffic in each direction. No pedestrian traffic is accommodated by the span.

The double span, filled spandrel, concrete arch bridge remains much the same as when it was constructed in 1923, retaining its original arches, wingwalls, abutments, and parapets. The decorative elements of the bridge are confined to the parapet walls. A closed parapet design was used, consisting of panels securely fastened by dowels to the structure. The parapet wall is incised with an alternating square and rectangular pattern. Each endblock has an incised panel measuring one foot by five feet. The central panel, situated directly above the pier, projects slightly from the exterior wall. The parapets are 118 feet in length on both sides of the bridge and are constructed of a medium-sized concrete aggregate. Topping the parapet walls is a medium-sized aggregate concrete slab railing.

Bridge No. 15002 over Seneca Creek was constructed at a key point in the history of road building in Maryland. During the 1920's, Maryland was considered to be 'the best-roaded state in the nation.' and the Maryland State Legislature enacted the "Lateral and Post Roads Loan of 1920." As many of the primary roads had already been constructed by this time, attention was focused on building the secondary road system for the state, including the farm-to-market network of feeder highways. Additionally, funds were appropriated for improving bridges and replacing one-way spans with two-lane bridges. Included in this building campaign was the 1.3 miles of concrete road laid from Dawsonville toward Seneca. Bridge 15002 was a part of this stretch of construction along Darnestown Road (MD 28).

Bridge No. 15002 over Seneca Creek stands as an example of the concrete arch bridge form that was being built in plentitude in Maryland in the early part of the twentieth century. Like other arch bridges of concrete construction, it displays graceful arches and a simply ornamented parapet. Representative of the road and bridge building campaigns for which Maryland was renowned in the 1920's, the bridge and associated roadway were rebuilt in 1923 as part of an effort to improve the secondary road system in the state.

MARYLAND HISTORICAL TRUST
MD INVENTORY OF HISTORIC PROPERTIES

Inventory No. M:18-49

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1. Name of Property

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historic name _____

common/other name MD 28 over Seneca Creek; Bridge 15002

=====

2. Location

=====

street & number Darnestown Road (MD 28) not for publication _____

city or town Dawsonville vicinity _____ state Maryland code MD

county Montgomery code 031 zip code 20874

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3. State/Federal Agency Certification

=====

N/A

=====

4. National Park Service Certification

=====

N/A

=====

5. Classification

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Ownership of Property (Check all that apply)

- ☐ private
☐ public-local
☒ public-State
☐ public-Federal

Category of Property (Check only one box)

- ☐ building(s)
☐ district
☐ site
☒ structure
☐ object

Number of Resources within Property

Contributing Noncontributing

<u>0</u>	<u>0</u>	buildings
<u>0</u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u>0</u>	<u>0</u>	objects
<u>1</u>	<u>0</u>	Total

Is this property listed in the National Register?

Yes _____ Name of Listing _____

No X

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 2

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6. Function or Use

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Historic Functions (Enter categories from instructions)

Cat: TRANSPORTATION

Sub: Bridge

Current Functions (Enter categories from instructions)

Cat: TRANSPORTATION

Sub: Bridge

=====

7. Description

=====

Architectural Classification (Enter categories from instructions)

No Style

Materials (Enter categories from instructions)

foundation Concrete

roof N/A

walls N/A

other _____

Narrative Description (Describe the historic and current condition of the property.)

See Continuation Sheet No. 7-1

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 7 Page 1

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

Bridge No. 15002 is a double-span, filled spandrel, concrete arch bridge running east-west over Seneca Creek, in Seneca Creek State Park. The bridge was erected in 1923 along MD 28, also known as Darnestown Road. The deck arch bridge over Seneca Creek carries the roadway above the structure's arch. Darnestown Road is a two-lane road, supporting one lane of traffic in each direction. No pedestrian traffic is accommodated by the span.

The bridge spans Seneca Creek with an overall length of nearly 116 feet, with the individual spans having a clear span of 46 feet. The spandrel walls measure approximately 13 feet high and 22 feet wide, with the central pier measuring 13 feet by 6 feet by 24 feet. The clear roadway is 24 feet in width, with an overall length of 27 feet 4 inches.

The double span, filled spandrel, concrete arch bridge remains much the same as when it was constructed in 1923, retaining its original arches, wingwalls, abutments, and parapets. The decorative elements of the bridge are confined to the parapet walls. A closed parapet design was used, consisting of panels securely fastened by dowels to the structure. The parapet wall is incised with an alternating square and rectangular pattern. Each endblock has an incised panel measuring one foot by five feet. The central panel, situated directly above the pier, projects slightly from the exterior wall. The parapets are 118 feet in length on both sides of the bridge and are constructed of a medium-sized concrete aggregate. Topping the parapet walls is a medium-sized aggregate concrete slab railing.

There are two bronze plaques located on the central panels of the interior walls of the parapet. The plaque on the north side states, Seneca Creek Bridge, Built 1923, State Roads Commission, John N. Mackall Chairman & Chief Engr., Omar D. Grothers, D.C. Winebrener, L. H. Steuart Secty., W. F. Childs, Jr. Dist. Engr. The plaque on the south wall of the parapet reads, The Concrete Steel Bridge Co., Contractors, Clarksburg, and W. VA.

There is a smooth transition from the abutments to the earth-filled spandrel walls. The wingwalls, abutments and arches have flat concrete surfaces that are devoid of decoration. The two shallow arches have 46-foot springlines, with 5.5-foot rises from springline to crown.

The substructure of the concrete arch bridge includes the central, supporting pier. The concrete pier divides the two arches and is slightly projecting from the exterior walls of the bridge.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 7 Page 2

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

A one-and-a-half story pumping station, constructed in two stages in the 1960's, sits on the west bank, to the south of the bridge. Set on a concrete foundation, the brick pump house has a flat roof with a skylight. It is adorned with molded brick corners with concrete quoins at the top of each. A wood frame deck is affixed to the north elevation and leads to the single, metal door. Containing seven pumps, the station pumps water to the Seneca Wastewater Treatment Plant and the treatment plant in Blue Plains. The pumping station, while located within Seneca Creek State Park, is owned and operated by the Washington Suburban Sanitary Commission.

While the original substructure and superstructure of the crossing are in place, the bridge displays numerous elements of deterioration. The underside of span #1 of the arch has small areas of honeycombing and spalling with rusted, exposed reinforcement bars and fine longitudinal cracks with efflorescence and rust staining along the south edge at the spandrel wall joint. The underside of span #2 has small random areas of honeycombing and spalling, with exposed reinforcement bars and concrete deterioration along the construction joint with the northern spandrel arch. The arch also has efflorescence from the centerline cold joint at the abutment. There is some heavy concrete erosion under weepholes.

The face of the pier has heavy erosion at and below the waterline, which exposes the aggregate. Both ends of the piers have spalling with rusted reinforcement bars exposed at the bottom of the spandrel walls and the western face on the south end. The pier also has scour marks along the full length of the west side, along one foot of the south end and along three feet six inches of the north end. The eroded concrete surfaces are routinely monitored and change slightly with each inspection. The north end of the pier has accumulated a large buildup of branches and debris, causing the majority of the creek to flow through span #1 of the bridge.

The faces of the wingwall have fine horizontal cracks and irregular cracks with efflorescence and some exudation. There are also some light random cracks and discoloration. The bottom edge of the spandrel walls have light scaling, fine longitudinal cracks and heavy efflorescence and rust staining coming from the construction joint with the arch barrel. The northern wall in span #2 has a large spall on the bottom at the pier and areas of honeycombing on the bottom of the wall.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 7 Page 3

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

The parapets have fine vertical and map cracking. The exterior faces have small popouts from the guardrail placement. Both walls have heavy scaling on the inside faces with aggregate exposed and light scaling on the outside faces. The south wall over the pier also has a small spall with rusted reinforcement bars exposed. Both sets of endblocks are misaligned at the construction joints.

Although there have been no major alterations, the parapet has received minor patches on both its interior and exterior walls. Additionally, the bridge has been monitored closely for movement of the spandrel walls due to frequent flooding of the western roadway approach.

As part of the 1.3 mile road built from Dawsonville towards Seneca in the early 1920's, the two-lane approach is paved with concrete. The road surface of the western approach is uneven and shows signs of heavy deterioration and general pavement failure in both curblines. Metal guardrails along each side of the road are in good condition. To each side of the bridge, there are signs indicating that it is a flood area.

The land immediately adjacent to the bridge slopes gently down to the water on both sides of Seneca Creek. Surrounded by farmland and park, the bridge is situated in a predominantly rural area, in Seneca Creek State Park. The brick pumping station on the west bank and a concrete abutment on the north side of the west abutment are the only structures immediately surrounding the bridge. The concrete abutment offers evidence of an earlier crossing over Seneca Creek at this site. The bridge over Seneca Creek is situated to the west of the Dawsonville Historic District, which is listed on the State Register of Historic Places with the Maryland Historical Trust.

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 3

=====

8. Statement of Significance

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Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- ☒ A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B Property is associated with the lives of persons significant in our past.
- ☒ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- ☐ A owned by a religious institution or used for religious purposes.
- ☐ B removed from its original location.
- ☐ C a birthplace or a grave.
- ☐ D a cemetery.
- ☐ E a reconstructed building, object, or structure.
- ☐ F a commemorative property.
- ☐ G less than 50 years of age or achieved significance within the past 50 years.

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 4

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Areas of Significance (Enter categories from instructions)

Transportation
Engineering

Period of Significance 1923

Significant Dates 1923

Significant Person (Complete if Criterion B is marked above)

Cultural Affiliation Undefined

Architect/Builder Maryland State Roads Commission

Narrative Statement of Significance (Explain the significance of the property.)

See Continuation Sheet No. 8-1

MARYYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 1

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

Maryland Department of Transportation Bridge No. 15002 is located along MD 28, also known as Darnestown Road. It spans Seneca Creek in Seneca Creek State Park, near Dawsonville in Montgomery County. This is one of a number of double span, filled spandrel, concrete arch bridges built in Maryland in the second decade of the twentieth century. The use of concrete as a building material dates back to the ancient Romans. However, its popularity as a common building material is a nineteenth century phenomenon, with the widespread use of reinforced concrete being a late nineteenth and early twentieth century development. In bridge construction, concrete was originally utilized for plain or unreinforced structures, and particularly in arch bridges, which were built in large numbers throughout the United States during the early years of the nation.

In the late nineteenth century, developments were made in the construction of concrete arch bridges with the introduction of reinforced concrete. There are four types of concrete arch bridges, classified by the way in which the load is carried. These four types are filled spandrel, closed spandrel, open spandrel, and through arches. The filled spandrel arch, as seen at Seneca Creek, consists of a barrel arch carrying filling materials, which are contained in longitudinal walls which act as retaining walls.¹

Spero quotes bridge engineer Daniel B. Luten as stating that, the most beautiful and appropriate applications of concrete to bridges, that is in the arch form, is also the most satisfactory from almost every engineering standpoint. The first known concrete arch bridge in the United States was constructed in 1889. Designed by Ernest Ransome, the bridge in Golden Gate Park in San Francisco was reinforced with rods or bars and scored to look like stone.²

Luten was highly instrumental in the development of the concrete arch bridge, receiving over thirty patents for his designs. Additionally, he published catalogs from his bridge company, which advertised a variety of earth-filled arch bridges of reinforced concrete construction. Luten claimed in his catalog that, to build a concrete bridge then, is just plain common sense ... the concrete

1 P.A.C. Spero, *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report*. July 1995 (Revised October 1995), 157.

2 Ibid., 157-159.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 2

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

arch harmonizes readily with its surroundings and if well designed is an attractive structure for any location.³ The gracefully arching Seneca Creek bridge is a simply ornamented man-made structure that, like many of Luten's designs, is in harmony with its surroundings.

Luten arch bridges known to have been built in Maryland often feature curved, simply ornamented solid parapets. Characterized by the graceful arch and the curved, incised solid parapets, this bridge was described in Luten Company catalogs as Highway Bridge of Plain Design.⁴ The gracefully curved arches and ornamented concrete parapets reflected the ideals of the City Beautiful Movement. Two Luten bridges of similar design were built in the Piedmont Region of Maryland, one being the Blair Bridge over the Potomac, built in 1910, and the other being the Frederick Road Bridge in Ellicott City, which was constructed in 1915. Both of these bridges are single span concrete arch bridges that are decorated in a similar manner to the one over Seneca Creek, with rectangular panels incised on closed parapet walls. While Luten did not design the bridge over Seneca Creek, his influence is clearly seen. Similar to Luten bridges in the near vicinity, Bridge No. 15002 has a simple, closed parapet design. The simply ornamented parapet wall consists of alternating square and rectangular panels incised in the concrete.

The bridge over Seneca Creek was constructed at a key point in the history of road building in Maryland. During the 1920's, Maryland was considered to be the best-roaded state in the nation. As many of the primary roads had already been constructed by this time, attention was focused on building the secondary road system for the state, including the farm-to-market network of feeder highways.⁵ In 1920, the Maryland State Legislature enacted the Lateral and Post Roads Loan of 1920. The Act that created this loan mandated that the proceeds were to be used for the construction of rural post roads, lateral roads and the extension of the State Roads System, with the assistance of funds from the federal government and several counties in the State. Additionally, funds were appropriated for improving bridge building and replacing one-way spans with two lane bridges. This money was apportioned to the

3 Daniel B. Luten. *Reinforced Concrete Bridges of Luten Design* (Indianapolis: The Hollenbeck Press, 1917), 45.

4 Spero, 159.

5 Charles T. Le Viness, *A History of Road Building in Maryland* (Baltimore: Maryland State Roads Commission, 1958), 69.

MARYYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 3

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

counties on the basis of actual road mileage. The counties then matched the State's money by bond issues, special assessments, or other revenue.

In addition to the extensive construction of roads in the 1920's, the bridge system was reappraised. Like the roads, the bridges were found to be both too narrow and too weak for the ever-increasing traffic.⁶ After realizing the deficiency in the bridges for the greatly increased number of roadways, the Maryland State Roads Commission created a separate department to direct bridge construction. The Bridge Division has been responsible for designing and supervising the construction of all water crossings, since its creation in 1920. Built in 1923, Bridge No. 15002 over Seneca Creek fell under the jurisdiction of the newly created department. There are only ten bridges dating from the 1920's that remain intact in Montgomery County, and, of these ten, only two are concrete arch bridges.

Between 1920 and 1930, 1200 miles of hard-surfaced roads were laid in Maryland, much of which was represented by the laying of local roads.⁷ Included in this building campaign was the 1.3 miles of concrete road laid from Dawsonville toward Seneca. Bridge 15002, a part of this stretch of construction along Darnestown Road (MD 28), replaced an earlier bridge at this crossing of Seneca Creek. On June 22, 1923, the State Roads Commission submitted a notice to contractors to the Montgomery County Sentinel. It called for, sealed proposals for building the following bridge Montgomery County, Contract M-18 - Reinforced concrete arch bridge over Seneca Creek, near Dawsonville, on the road to Dawsonville, consisting of a double span, each 46 feet clear and a 24 feet clear roadway. Proposals were to be submitted to John N. Mackall, Chairman and L. H. Steuart, Secretary of the State Roads Commission. They were due by noon on June 26, 1923 in Baltimore.⁸ This new bridge would replace the earlier one at the site. According to maps of Dawsonville and Montgomery County, a bridge existed at this location as early as 1795.⁹

6 Le Viness, p. 129.

7 Ibid., 101.

8 *Montgomery County (MD) Sentinel*. 22 June 1923, p.3.

9 1795 Map of Montgomery County. Montgomery County Historical Society Library, Rockville, Maryland.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 4

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

A bridge was constructed to cross Seneca Creek as early as 1795, allowing local farmers access to the mill on Seneca Creek and passage from the community of Dawsonville. Dawsonville is a small farming community located to the west of the bridge. Thomas Dawson, for whom the town is named, settled Dawsonville in the 1740's. The farming community utilized the bridge to reach the business center at Seneca. Dawsonville farms primarily produced wheat, corn, oats, potatoes, and tobacco. Farmers took their grain to the mill on Seneca Creek and then shipped their goods to market on the Chesapeake and Ohio Canal. The C & O Canal in Seneca was completed in 1830 and reached its peak in 1871, when over 850,000 tons were transported.¹⁰ Furthermore, the Metropolitan line of the Baltimore and Ohio Railroad was laid through Seneca in 1873.¹¹ The nearby Boyd's Station provided access to the B & O Railroad. Both the canal and the railroad drew farmers from the surrounding community to Seneca. The residents of nearby Dawsonville, traveling over the previous crossing at Seneca Creek, likely utilized the port town to ship their goods to market and to travel to other parts of the country.

Seneca was originally a farming community in which tobacco and grains were important crops. Additionally, apple and peach orchards were planted in the rich soil. The availability of waterpower from the many streams made possible the development of a number of grist mills in the area.¹² Seneca is also known for its stone cutting mill. Seneca sandstone was shipped down the canal to Washington and was used to construct such buildings as the Old Smithsonian Institution and the Corcoran Art Gallery.¹³ In the 1830's, Seneca became a business center for the canallers, the quarrymen, and the farmers who brought their grain to the tall mill on Seneca Creek and their tobacco to the canal boats on the way to Georgetown. Seneca continued to flourish and was an active, industrial town from the 1870's to the 1890's.

The bridge over Seneca Creek spans the Great Seneca Creek. From

10 Jane C. Sween. *A History of Dawsonville and Seneca; Montgomery County, Maryland*. (Bethesda, MD: written 1967, revised 1993).

11 P. Peregoy, L. Tublio, and T. Leahy. *The Progression of Seneca: 17th - 19th Century*. (Maryland: April 9, 1976), p.4 (Vertical Files at Seneca Creek State Park).

12 *Seneca Creek State Park* (Pamphlet at Seneca Creek State Park).

13 Peregoy, et al., p. 4.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 5

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

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its headwaters north of Gaithersburg, Maryland, the creek snakes through a narrow stream valley, passing through fields, dense woods and rock outcroppings. Many small streams join Great Seneca Creek as it winds its way through western Montgomery County towards its confluence with the Potomac River at the town of Seneca.¹⁴ As early as 1795, a bridge crossed Great Seneca Creek at Darnestown Road.¹⁵ The eighteenth-century bridge was replaced by a later bridge which is evident on a 1910 map of Montgomery County. The remaining fragments of concrete abutment on the north side of the west abutment are evidence of the previous bridge at this crossing. This bridge was replaced in 1923 by the current span over Seneca Creek.

Bridge No. 15002 over Seneca Creek stands as an example of the concrete arch bridge form that was being built in plentitude in Maryland in the early part of the twentieth century. Like other arch bridges of concrete construction, it displays graceful arches and a simply ornamented parapet. Representative of the road and bridge building campaigns for which Maryland was renowned in the 1920's, the bridge and associated roadway were rebuilt in 1923 as part of an effort to improve the secondary road system in the state.

¹⁴ Ibid.

¹⁵ 1795 Map of Montgomery County.

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Section 8 Page 6

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

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National Register Evaluation:

Constructed in 1923, the bridge over Seneca Creek in Montgomery County is eligible for the National Register of Historic Places.

Bridge 15002 does not meet the National Register Criteria B or D. Preliminary research has not revealed any association between the bridge and the lives of persons significant in our past (Criterion B). Furthermore, there is no evidence that the bridge is likely to yield information important in history or prehistory (Criterion D).

However, based on Criterion A, the bridge, which is representative of those bridges and roads constructed as part of the Lateral and Post Roads Loan of 1920, is eligible for listing on the National Register. Under the Lateral and Post Roads Loan of 1920, the bridge over Seneca Creek was rebuilt as part of an effort to improve the secondary road system in the state of Maryland. Furthermore, it is also eligible under Criterion C, as it embodies the distinctive characteristics of a type, period, and method of construction. Bridge No. 15002, with its graceful arches and simply ornamented parapet wall, strongly reflects the concrete arch trend in bridge design and its widespread use in the early part of the twentieth century. Based on both Criteria A and C, the bridge is National Register-eligible.

MARYLAND HISTORICAL TRUST

Eligibility recommended XX Not Recommended _____

Comments:

DETERMINED ELIGIBLE BY INTERAGENCY
BRIDGE COMMITTEE IN MARCH 1996. WE
CONTINUE TO AGREE.

Review, OPS: June S. Bond Date: 12/14/98

Reviewer, NR Program: BKuntz Date: 12/14/98

gmg

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 5

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9. Major Bibliographical References

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(Cite the books, articles, legal records, and other sources used in preparing this form.)

1795 *Map of Montgomery County*. Montgomery County Historical Society Library, Rockville, Maryland.

Hopkins, G. M. *Atlas of Montgomery County*. Philadelphia, 1878.

Le Viness, Charles T. *A History of Road Building in Maryland*. Baltimore: State Roads Commission of Maryland, 1958.

Luten, Daniel B. *Reinforced Concrete Bridges of Luten Design*. Indianapolis: The Hollenbeck Press, 1917.

Luten, Daniel B. *Reinforced Concrete Bridges of Luten Design*. Indianapolis: The Boda Press, Inc., 1924.

Martenet, Simon J. *Martinet and Bond Map of Montgomery County, Maryland*. Baltimore: Simon J. Martinet, 1865.

Maryland Department of Transportation, Bridge Division. 707 N. Calvert Street, Baltimore, MD. Drawing Files and Vertical Files.

Maryland Department of Transportation, Office of Bridge Development. Bridge Inventory, 1996.

Maryland Geological Survey. *Map of Montgomery County and District of Columbia Showing the Topography and Election Districts*, 1910.

Maryland Geological Survey. *Map of Montgomery County and District of Columbia Showing the Topography and Election Districts*, 1927.

Maryland National Capital Parks and Planning Commission. 8787 Georgia Avenue, Silver Spring, MD. Dawsonville Historic District and Darnestown Historic District Files.

Montgomery County Sentinel. 22 June 1923, Vol. LXVIII, No. 4.

Montgomery County Historical Society Library. 103 W. Montgomery Avenue, Rockville, MD. Vertical Files.

Preservation Information: Preserving Historic Bridges. Washington, DC: National Trust for Historic Preservation, 1984 (Revised 1995).

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 6

P.A.C. Spero & Company and Louis Berger & Associates. *Historic Highway Bridges in Maryland: 1631-1960, Historic Context Report*, July 1995 (Revised October 1995).

Seneca Creek State Park. 11950 Clopper Road, Gaithersburg, MD.
Vertical Files.

Sween, Jane C. *A History of Dawsonville and Seneca; Montgomery County, Maryland*. Bethesda, MD: n.p., 1967 (Revised 1993).
Montgomery County Historical Society Library, Rockville, MD.

United States Geological Survey. *Quad Map of Germantown, MD*, 1943 and 1953.

Maryland Inventory of Historic Properties
Maryland 28 over Seneca Creek
Darnestown Road
Montgomery County, MD

Inventory No. M:18-49
Page 7

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10. Geographical Data

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Acreage of Property less than one acre

Verbal Boundary Description (Describe the boundaries of the property.)

Located along Darnestown Road (MD 28), Bridge 15002 spans the northerly flowing Seneca Creek in an east-west direction. Seneca Creek is located within the Seneca Creek State Park, near Dawsonville, in Montgomery County.

Boundary Justification (Explain why the boundaries were selected.)

The bridge has spanned this portion of Seneca Creek since its construction in 1923.

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11. Form Prepared By

=====

name/title Laura V. Trieschmann, Architectural Historian
organization EHT Traceries, Inc. date August 14, 1998
street & number 5420 Western Avenue telephone 301/656-5283
city or town Chevy Chase state MD zip code 20815

=====

12. Property Owner

=====

name State of Maryland
street & number _____ telephone _____
city or town _____ state _____ zip code _____

=====

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

MARYLAND INVENTORY OF HISTORIC PROPERTIES

Geographic Organization:

Piedmont

Chronological/Development Period (s):

Industrial/Urban Dominance (1870-1930)

Prehistoric/Historic Period Theme (s):

Architecture, Landscape Architecture, and
Community Planning
Transportation

RESOURCE TYPE(S)

Category:

Structure

Historic Environment:

Rural

Historic Function (s):

TRANSPORTATION/Bridge

Known Design Source:

Maryland State Roads Commission

MARYLAND INVENTORY OF HISTORIC PROPERTIES
CONTINUATION SHEET

Inventory No. M:18-49

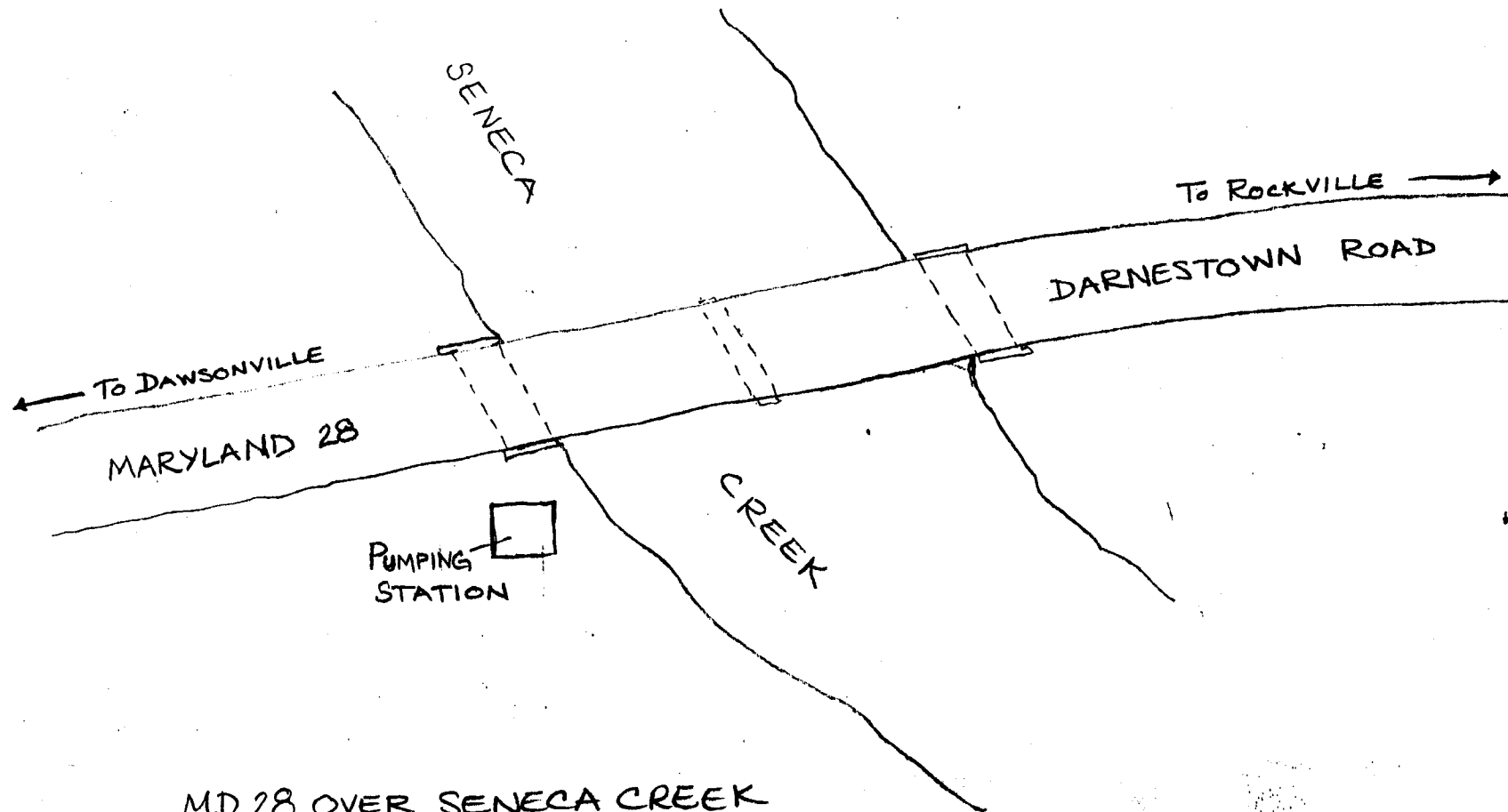
Maryland 28 over Seneca Creek
name of property
Montgomery County, MD
county and state

=====

Chain of Title:

Owned by State of Maryland

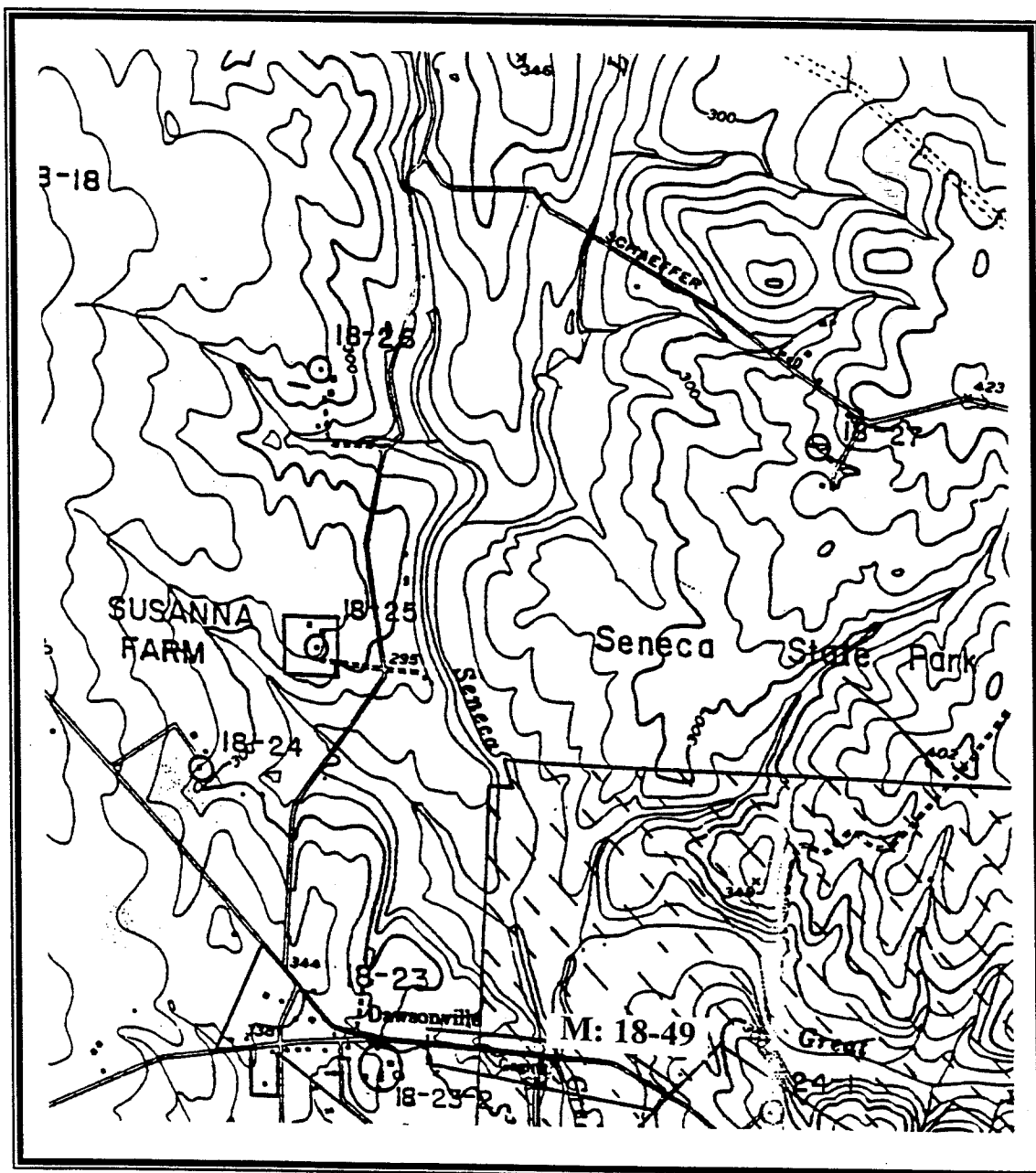
M:18-49

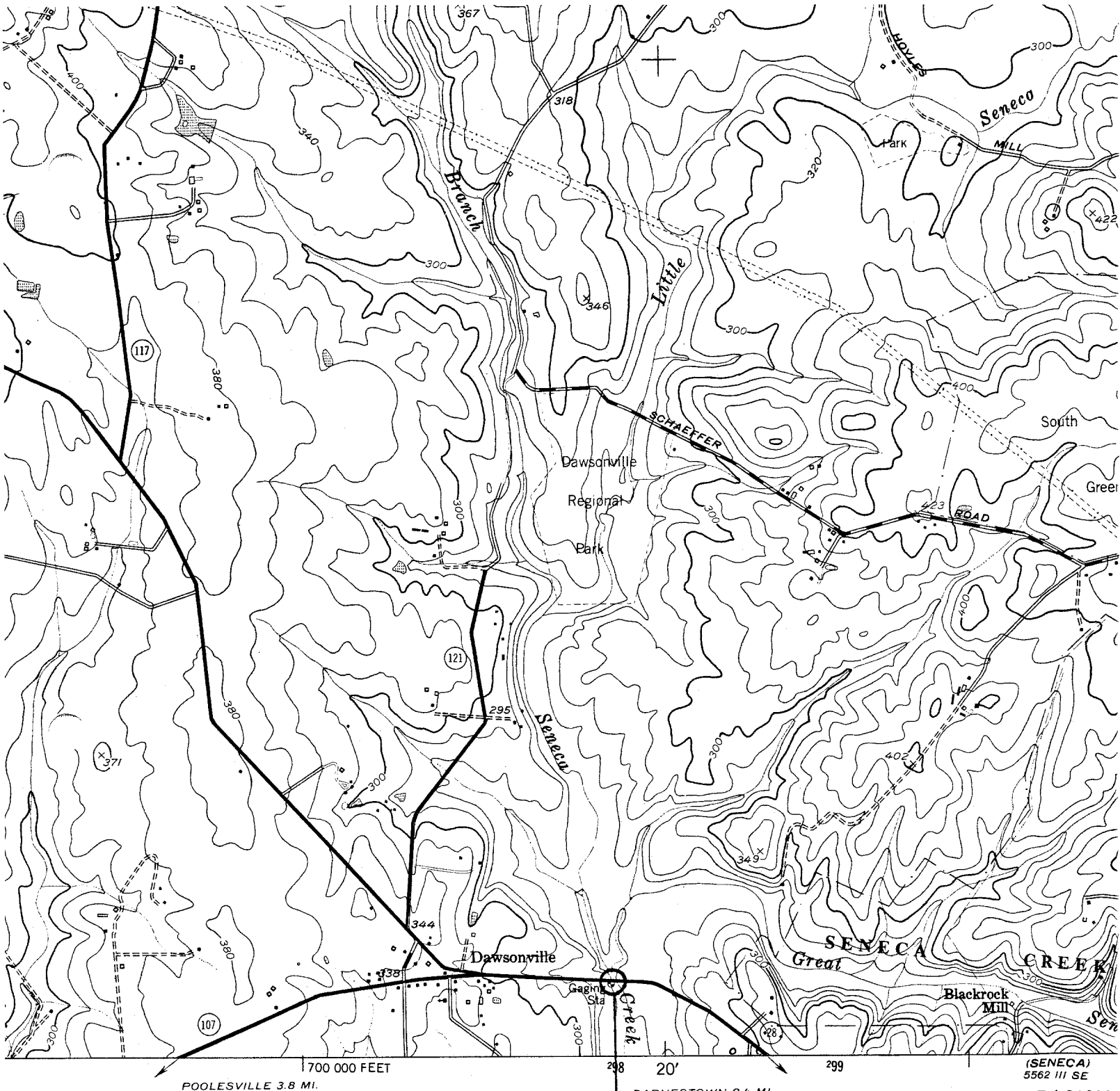


MD 28 OVER SENECA CREEK
BRIDGE 15002
DAWSONVILLE, MONTGOMERY COUNTY

M: 18-49

United State Geological Survey
Germantown Quad
Montgomery County, Maryland



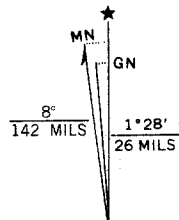


Army Map Service
 Sheet by the Geological Survey

erial photographs by KEK plotter
 taken 1942. Field check 1943
 Geological Survey 1953

on 1927 North American datum
 based on Maryland coordinate system
 sal Transverse Mercator grid ticks,
 blue

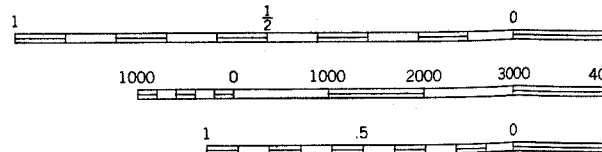
purple and woodland compiled by the Geological
 photographs taken 1978 and other source data
 of field checked. Map edited 1978
 wn in purple compiled from latest
 e from the controlling authority



UTM GRID AND 1979 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

M:18-49

GERMANTOWN QUAD



CONTOUR INTERVAL 2
 NATIONAL GEODETIC VERTICAL D

THIS MAP COMPLIES WITH NATIONAL MAP
 FOR SALE BY U.S. GEOLOGICAL SURVEY,
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SY



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/30/98

MARYLAND SHPO

WIDE GENERAL OVERVIEW, VIEW NORTH

1 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/31/98

MARYLAND SHPO

WIDE GENERAL OVERVIEW OF BRIDGE, VIEW SOUTH

2 OF 14



M: 18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/30/98

MARYLAND SHPO

GENERAL OVERVIEW OF BRIDGE DECK, VIEW NW

3 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

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7/30/98

MARYLAND SHPO

GENERAL OVERVIEW OF BRIDGE DECK, VIEW NE

4 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

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7/31/98

MARYLAND SHPO

GENERAL OVERVIEW, BRIDGE VIEW SOUTH

5 OF 14



M:18÷49

MD 28 OVER SENeca CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/31/98

MARYLAND SHPO

GENERAL OVERVIEW OF BRIDGE, VIEW NORTH

6 OF 14



M: 18-49

MD 28 OVER SENECA CREEK
MONTGOMERY COUNTY, MD

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7/30/98

MARYLAND SHPO

VIEW OF ARCH, SPAN, PIER, VIEW NW

7 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

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MARYLAND SHPO

ARCH, SPAN & PIER VIEW, SE

8 OF 14



M:18-49

MD 28 OVER SENECA CREEK
MONTGOMERY COUNTY, MD
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MARYLAND SHPO
BRIDGE DECK RAIL, VIEW NW

9 OF 14



M'18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/31/98

MARYLAND SHPD

BRIDGE DECK RAIL, VIEW SE

10 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

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7/30/98

MARYLAND SHPO

DETAIL VIEW OF BRIDGE RAIL DECORATION, VIEW NORTH

11 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

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7/30/98

MARYLAND SHPO

DETAIL VIEW OF PIER & EMBANKMENT, VIEW NE

12 OF 14



M:18-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/31/98

MARYLAND SHPO

END OF BRIDGE DECK RAIL, VIEW S/SW

13 OF 14



M: 1B-49

MD 28 OVER SENECA CREEK

MONTGOMERY COUNTY, MD

JOHN CALEB SCHWARTZ

7/31/98

MARYLAND SHPO

DETAIL OF CRUMBLING PIER, VIEW NW

14 OF 14